

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2005/000190

A. CLASSIFICATION OF SUBJECT MATTER
IPC7 B01D-29/66 B01D-46/04 B01D-35/16 B01D-53/34
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)
CPD, Delphion

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No(s). |
|-----------|---|--------------------------|
| X | US 4,174,204 (Chase) 1979-11-13 *whole document* | 1, 2, 4, 5, 6 and 13 |
| Y | | 3 and 7 to 12 |
| Y | US 5,626,820 (Kinkead et al.) 1997-05-06 *Figure 3* | 8 |
| Y | CA 1,057,523 (Axelsson et al.) 1979-07-03 *page 1, second paragraph* | 11 and 12 |
| Y | CA 2,252,384 (Vicard et al.) 1997-10-3 *page 9, line 38 to page 10, line 2 and figure 4* | 11 and 12 |
| Y | CA 2,113,703 (Kool) 1994-08-17 | 14 to 20 |
| Y | CA 2,425,979 (Estkowski) 2002-05-16 | 14 to 20 |

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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|---|--|
| * Special categories of cited documents : | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier application or patent but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search

06 May 2005 (06-05-2005)

Date of mailing of the international search report

26 May 2005 (26-05-2005)

Name and mailing address of the ISA/CA
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No(s). |
|-----------|--|--------------------------|
| Y | CA 1,226,232 (Howeth) 1987-09-01 *page 6, final paragraph and figure 1* | 14 to 20 |
| A | CA 1,290,707 (LeBlanc et al.) 1991-10-15 | |
| A | CA 1,122,545 (Brenholt) 1982-04-27 | |
| A | CA 1,327,949 (Prinsloo et al.) 1994-03-22 | |
| A | US 3,885,931 (Schaller) 1975-05-27 | |
| A | US 4,144,043 (Johnston) 1979-03-13 | |
| A | US 6,494,935 (Cho et al.) 2002-12-17. | |
| A | US 4,333,745 (Zeanwick) 1982-06-08 | |

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☐ Claim Nos. :
because they relate to subject matter not required to be searched by this Authority, namely :

2. ☐ Claim Nos. :
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

3. ☐ Claim Nos. :
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

Group A: Claims 1 to 13 are directed to an apparatus for filtering particulates from a gas, and a method for removing particulates from a filter in a gas filtration system, wherein a back-pulse generator/vortex generator is positioned on the filtrate side (downstream side) of the filter.

Group B: Claims 14 to 20 are directed to an apparatus for filtering particulates and an undesired gas from a main gas, comprising a particulate treatment station, a chemical treatment station and a pressure differential system to cause a flow of the main gas through the particulate treatment station and the chemical treatment station, wherein the particulate filter in the particulate treatment station is in a first casing removable from the particulate treatment station.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
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| Continued on Extra Sheet... | | | |

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